

Rev 09/09

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application : Satoshi Murouchi et al.
Application No. : 10/519,046
Filed : August 19, 2005
Confirmation No. : 6619
For : WHOLLY AROMATIC LIQUID CRYSTAL POLYESTER
RESIN MOLDED PRODUCT
Examiner : Michael B. Nelson
Attorney's Docket : AK-481XX

TC Art Unit: 1794

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PRE-APPEAL BRIEF REQUEST FOR REVIEW**Via Electronic Filing**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Final Office Action dated July 2, 2009 and the Advisory Action dated October 13, 2009, and further in view of the Notice of Appeal filed herewith, Applicants hereby request review of the final rejection in the above-identified application prior to the filing of an appeal brief.

The Claimed Invention

The claimed invention is directed to an injection molded product having properties including a dielectric constant of 3.0 or less. The molded product possesses inclusions of inorganic spherical hollow material having a specified range of fracture rate.

Final Rejection

Claims 1, 2 and 4-9 are finally rejected for alleged lack of written description. Specifically, the claim 1 limitation "wherein

the fracture rate X of the inorganic spherical hollow material is 0.045 to 0.094" is said to lack written description support over the entire recited range. More specifically, the Examiner maintains that Applicants were not in possession of the entire claimed range at the time of filing, because Applicants' examples utilize fracture rates that are clustered near the endpoints of the range, without any data points in the portion of the range from 0.050 to 0.080, covering about 60% of the range.

Applicants requested reconsideration of the final rejection in view of the declaration of Mr. Yoshiharu Iwasaki, which presented evidence that the ordinary skilled person would have expected the same properties (e.g., dielectric constant of 3.0 or less) over the range from 0.050 to 0.080 as for the region where data were shown. However, the Examiner has maintained the rejection in the Advisory Action.

Brief Summary of Issue for Appeal

Applicants' position is that the maintained final rejection is based on clear legal error.

The case law on written description holds that an invention is adequately described when the originally filed disclosure reasonably conveys to a person having ordinary skill in the art that the applicant had possession of the subject matter claimed.

Applicants provided as evidence of such possession the declaration of Mr. Yoshiharu Iwasaki, who stated that "the ordinary skilled person at the priority date of the 10/519,046 application would have readily assumed that the dielectric constant of a molded product . . . would be less than 3.0 over the entire range of fracture rate of the inorganic spherical hollow material of 0.045 to 0.094, even though this is not verified in the Examples over some portion [of] the range". Mr. Iwasaki then concluded: "One of ordinary skill in the art would have appreciated that the inventors were in possession a molded product having a dielectric constant of 3.0 or less and a dielectric dissipation

factor of 0.04 or less even at fracture rates in the middle section of the claimed range of fracture rates (e.g. 0.05-0.08)." Declaration of Yoshiharu Iwasaki at Paragraph 8. In response to such evidence, the Examiner is required to either rebut the evidence or withdraw the rejection. MPEP 2163.04. The Examiner has offered no rebuttal of Mr. Iwasaki's declaration, but instead has maintained the rejection in a conclusory manner.

Therefore, in not withdrawing the rejection after receiving the Declaration, the Examiner has failed to apply the established law of written description, and the rejection should be withdrawn on appeal.

The Written Description Requirement Applied to the Present Claims

A patent application need not describe a claim limitation exactly. *In re Smythe*, F.2d 1376, (C.C.P.A. 1973). The invention is adequately described when the originally filed disclosure reasonably conveys to a person having ordinary skill in the art that the applicant had possession of the subject matter claimed. *Ex parte Sorenson*, 3 U.S.P.Q.2d 1462, 1463 (P.T.O. Bd. Pat. App. & Int'f. 1987).

With regard to using numerical values from the disclosure to support a claimed range, the case law is clear that not every value within the range has to be described or exemplified. In the case of *In re Blaser* (194 U.S.P.Q. 122 (C.C.P.A. 1977)), claim 1 was limited to a range of 1.2-1.5 moles of water in a reaction. The range was not disclosed literally in the specification, but was supported by examples using 1.2 and 1.5 moles, the two endpoints. The claimed range was added by amendment, and the claims were rejected for new matter. The court found that the examples provided adequate written description because "persons skilled in the art would consider processes employing 1.2 to 1.5 mols water as part of appellants' invention"

In the present case, the Examiner has alleged that Applicants were not in possession of the range of fracture rates of 0.05-0.08 simply because there are no data points over this portion of the claimed range.

Notably, the Examiner has offered neither any evidence nor any rationale for expecting the properties of the claimed product to deviate from the claimed properties over this range, other than the absence of data for this part of the range.

Applicants' have rebutted the Examiner's contention that the range from 0.050 to 0.080 was not described by presenting the declaration of Mr. Iwasaki. The declaration provided evidence that the ordinary skilled person would have expected that a continuous trend exists between Applicants' exemplified fracture rates. This is based on a theoretical relationship described in the declaration, which was known at the time of the invention. Therefore, the ordinary skilled person would have interpreted Applicants' disclosure as demonstrating possession of the invention, because the skilled person would have readily appreciated the continuous trend between the exemplified data points. As the inventors themselves were clearly of at least ordinary skill in the art, they also would have been aware of the theoretical relation described in the declaration, and therefore must have been in possession of the full range of fracture rates of the invention.

Indeed, the claimed range would have been adequately described with only the two endpoints, given the predictable trend between those endpoints. Applicants should not be penalized for presenting more data points than just the endpoints, just because those points are somewhat clustered near the endpoints. There is no requirement for presenting an even distribution of data points over a range, when the properties over the entire range are clear to the person of ordinary skill.

The Examiner has not refuted any of the facts or reasoning presented in Mr. Iwasaki's declaration. In the Advisory Action at paragraph 9, the Examiner states: "Applicant's declaration is found to be persuasive in that it alleges that it would be obvious to one having ordinary skill in the art that the dielectric properties of the values around 0.045 and 0.094 would follow a trend that would also apply to values between 0.05 and 0.08" Thus, the Examiner admits that

Applicants have rebutted his earlier assertion that Applicants were not in possession of this part of the claimed range.

The Examiner maintained the rejection, offering only the following as his basis: "this does not alleviate the underlying issue that applicant cannot provide any evidence to show that the fracture rates of 0.05-0.08 were within their possession at the time of the invention." However, exactly such evidence has been presented, because as Mr. Iwasaki's declaration states, it would have been clear to the person of ordinary skill that the dielectric properties of the claimed material follow a consistent trend over the entire range of fracture rates of 0.045 to 0.094, and therefore it would have been clear to the ordinary skilled person that the invention included the entire range.

The withdrawal of the written description rejection and the allowance of the claims are respectfully requested.

Respectfully submitted,

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Dated: November 2, 2009

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